## Kentucky Retirement Systems Overview



Presented to the

**Blue Ribbon Commission on Public Employees Retirement Systems** 

May 14, 2007

by

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### Kentucky Retirement Systems (KRS) Facts

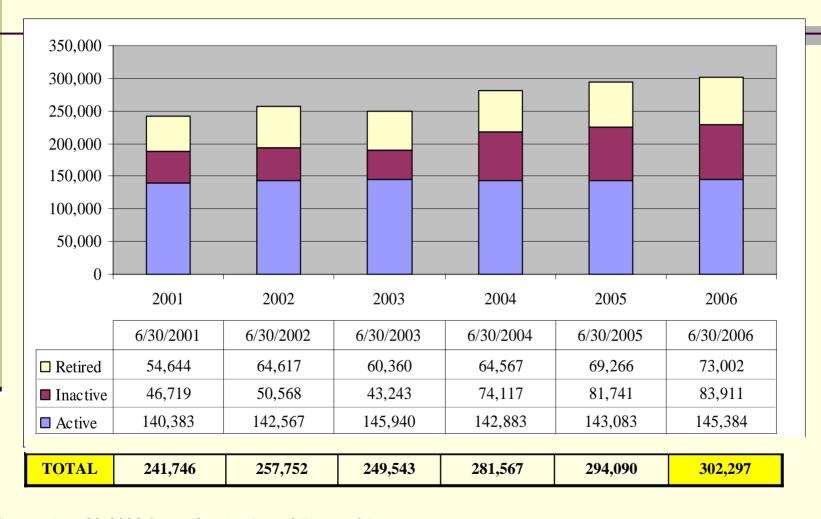
- KRS administers retirement benefits for more than 302,000 state and local government employees.
  - These employees include state employees, state police officers, city and county employees, local agency employees, and nonteaching staff of local school boards and regional universities.
  - KRS administers three plans:
    - Kentucky Employees Retirement System (KERS)
    - County Employees Retirement System (CERS)
    - State Police Retirement System (SPRS)

## **Plan Administration**

- A nine-member Board of Trustees administers the systems:
  - Two trustees elected by KERS members
  - Two trustees elected by CERS members
  - One trustee elected by SPRS members
  - Three trustees appointed by the Governor
  - The Secretary of the Kentucky Personnel Cabinet, ex officio
- The Board appoints an Executive Director to act as the Chief Administrative Officer of the Board

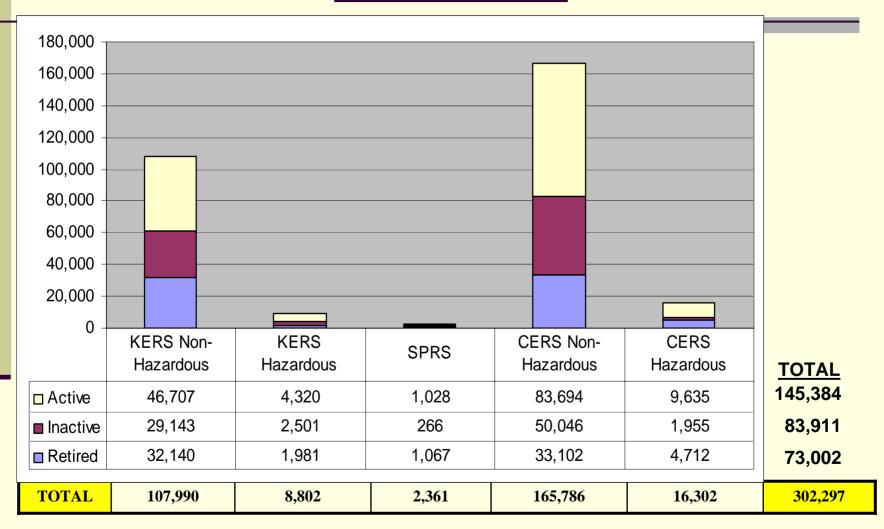
KRS reports to the Kentucky General Assembly and Governor

## **KRS Membership (2001 – 2006)**



Source: June 30, 2006 Comprehensive Annual Financial Report

## KRS Membership by System and Status (June 30, 2006)



### **KRS Current Assets and Benefit Payments**

As of March 31, 2007 KRS assets are \$16.43 billion

- KRS pays \$1.3 billion in pension and health insurance benefits each year
  - 96% of benefit payments are delivered to Kentucky residents and have a significant impact on the Kentucky economy

## Plan Type

The three systems administered by KRS are *Qualified Public Defined Benefit Plans*, established under **Section 401a** of the Internal Revenue Code.

Defined Benefit plans pay pension benefits based on a formula, while Defined Contribution plans (such as a 401(k) plan) pay benefits based on contributions and earnings on those contributions.

## Benefit Formula (Statutory)

#### The KRS formula at full retirement:

Final Compensation

Benefit **X** Factor

Years of Service

 $\mathbf{X}$ 

Annual Benefit

The average salary used for determining benefits at the time of retirement.

A percentage based upon the system, the type, and the timing of the member's service

Current service, prior service, past service, purchased service, and sick leave (if agency participates)

#### **■ Non-Hazardous Members:**

- Normal Retirement
  - Age 65 or older with at least one (1) month of service credit may elect to receive a benefit for life that is an actuarial equivalent to twice the member's contributions and interest
  - Age 65 or older with at least 48 months of service credit is eligible to receive an unreduced benefit for life based on the formula

Statute Reference: KRS 61.510(18), 61.559

#### **■ Non-Hazardous Members:**

- Early Retirement
  - 27 years of service credit regardless of age (Unreduced benefit for life)
  - 25 years of service credit regardless of age (Reduced benefit for life)
  - Age 55 with 5 or more years of service credit (Reduced benefit for life)

Statute Reference: KRS 61.559

#### Hazardous Members:

- Normal Retirement
  - Age 55 or older with at least one (1) month of service credit may elect to receive a benefit for life that is an actuarial equivalent to twice the member's contributions and interest
  - Age 55 and older with at least 60 months of hazardous duty service credit is eligible to receive an unreduced benefit for life based on the formula

Statute Reference: KRS 16.576

#### Hazardous Members:

- Early Retirement
  - 20 years of service credit regardless of age (Unreduced benefit for life)
  - Age 50 with 15 or more years of service credit (Reduced benefit for life)

## KRS Health Insurance Benefits for Members Participating Prior to July 1, 2003

Total Non-Hazardous Service	Percent Paid for Retired Member*	Total Hazardous Service	Percent Paid Toward Dependent Coverage**	
Less than 4 Years	0%	Less than 4 Years	0%	
4 – 9+ Years	25%	4 – 9+ Years	25%	
10 – 14+ Years	50%	10 – 14+ Years	50%	
15 – 19+ Years	75%	15 – 19+ Years	75%	
20 or more Years	100%	20 or more Years	100%	

<sup>\* 100%</sup> of the monthly contribution is paid toward health insurance for a retired member in a Non-Hazardous position who is totally disabled from any employment as a result of a duty-related injury, regardless of actual service.

<sup>\*\* 100%</sup> of the monthly contribution is paid towards the health insurance for a member, member's spouse and dependents, if the member is in a Hazardous position and is disabled in the line of duty as a result of a duty-related injury, regardless of actual service.

#### **Analysis of Initial Retirees FY 2005 - 2006**

	Number of Initial Retirees	Average Service Credit (Months)	Average Final Compensation	Average Monthly Benefit	Average System Payment for Health Insurance	Average Monthly Benefit (all retirees) by Length of Service (25-30 years credit for Nonhazardous; 20-25 years credit for Hazardous)
KERS Non- Hazardous	2,295	267	\$46,746	\$1,885	\$246	\$1,921
KERS Hazardous	236	239	\$43,845	\$1,185	\$381	\$1,117
CERS Non- Hazardous	2,543	197	\$29,794	\$851	\$180	\$1,668
CERS Hazardous	377	260	\$54,358	\$2,047	\$543	\$1,691
SPRS	39	259	\$62,049	\$2,614	\$407	\$2,103

<sup>\*</sup> Source: June 30, 2006 Comprehensive Annual Financial Report

### **How is KRS Funded?**

- There are three (3) sources of funding for Kentucky Retirement Systems:
  - **Employee Contributions:** 
    - Set by statute
  - **Employer Contributions:** 
    - Set annually by the KRS Board of Trustees based on an independent actuarial valuation and recommendation
  - Return on Investments
    - The KRS Investment Committee has the authority to make investment decisions and hire external investment managers and consultants
    - KRS utilizes internal investment staff, external investment managers, and independent investment consultants to conduct the investment program

### **How is KRS Funded?**

The Majority of KRS Funding Comes from Return on Investments









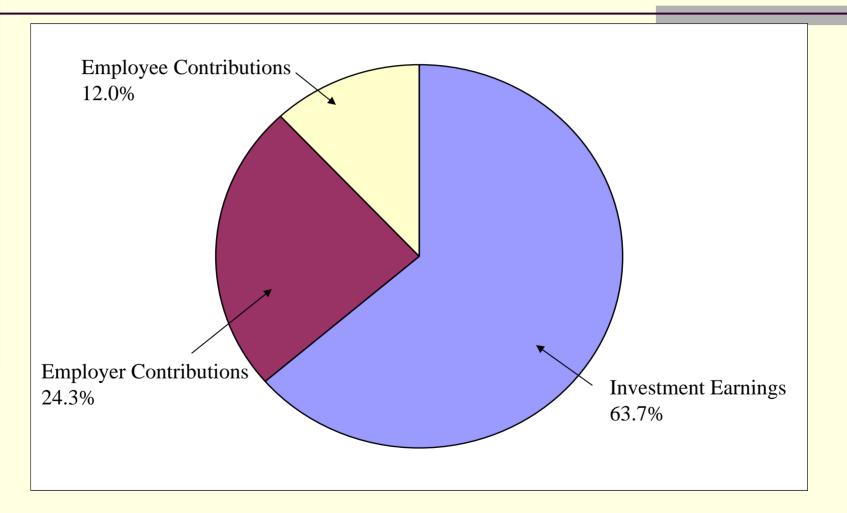


Employee 16%

Employer 20%

Investment Income 64%

# Public Pension Fund Revenue Sources, U.S., 1982 to 2005



Source: US Census Bureau

17

## **Employee Contributions**

- Account for approximately 16% of the funding necessary to pay retirement benefits
- Set by statute as a percentage of creditable compensation

System	Current Employee Contribution Rate	Date of Last Change	
KERS Non-Hazardous	5% (previously 4%)	August 1986	
KERS Hazardous	8% (previously 7%)	July 2000	
CERS Non-Hazardous	5% (previously 4.25%)	August 1990	
CERS Hazardous	8% (previously 7%)	August 1998	
SPRS	8% (previously 7%)	August 1998	

## **Employer Contributions**

- Set by Board of Trustees based on actuarial analysis and recommendations
- Employer Contribution Rate Consists of:
  - Pension Contribution
    - Normal Cost = Ongoing cost of the plan
      - In a perfect world, we would only have normal cost
    - UAL Payment = Amortized payment/Credit to pension fund for Unfunded Actuarial Liabilities
      - Can increase or reduce employer contributions

#### Insurance Contribution

- Created by 1978 Legislature
- Made a contractual obligation by 1988 Legislature
- In 2006, GASB 43 and 45 changed the accounting and reporting requirements related to Other Post Employment Benefits (OPEB) for public retirement systems.
  - KRS must now recognize and report on an accrual basis the cost of retiree health insurance benefits over the working life of the employee

## Actuarially Recommended 2006 Employer Contributions (as a percent of payroll)

<u>System</u>	Normal Cost	Admin. Expense	Pmt. on UAL	Insurance Fund	Combined Recommended Rate
KERS (Non-Haz)	3.27%	.45	11.83%	32.82%	48.37%
KERS (Haz)	6.80%	.47	2.93%	36.91%	47.11%
CERS (Non-Haz)	4.04%	.65	2.29%	20.51%	27.49%
CERS (Haz)	7.86%	.26	6.89%	39.52%	54.53%
SPRS	8.92%	.28	19.75%	91.05%	120.0%

Source: June 30, 2006 Actuarial Valuation

# Actual *versus* Recommended FY 2006 - 2007 Employer Contributions

- KERS and SPRS employer contribution rates are subject to approval by GA in biennial budget legislation
- CERS employer rates are those set by the Board of Trustees

	Actual Contribution	Recommended Contribution
KERS Non-Hazardous	7.75%	17.13%*
KERS Hazardous	22.00%	23.32%*
CERS Non-Hazardous	13.19%	13.19%
CERS Hazardous	28.21%	28.21%
SPRS	25.50%	42.30%*

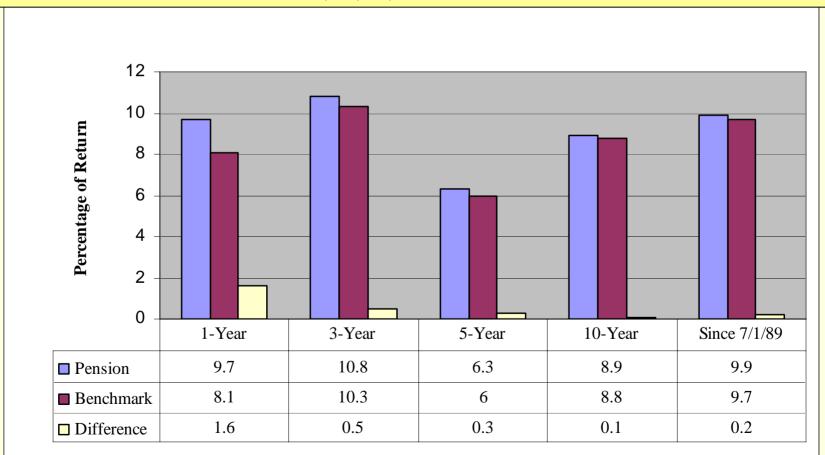
<sup>\*</sup> Recommended contribution is based on the June 30, 2005 valuation. When the 2006 – 2008 budget biennium is complete, the state will have reduced KERS and SPRS contribution rates for nine (9) of the last fifteen fiscal years.

### INVESTMENT PERFORMANCE

- Historically, KRS investment income represents 64% of total income available to pay benefits
- According to Strategic Investment Solutions (SIS), an independent investment consulting firm: "KRS should be quite proud of its historical returns. It has significantly outperformed the Total Fund benchmarks for both plans, at a lower level of risk over most periods, while remaining competitive with its public fund peers." Memo from SIS, 3/23/07
- In addition to providing investment returns in excess of established benchmarks, KRS has carefully controlled its investment expenses. A 2005 study by CEM Benchmarking, Inc. of 268 pension funds, rated KRS as a "High Value Added & Low Cost" system

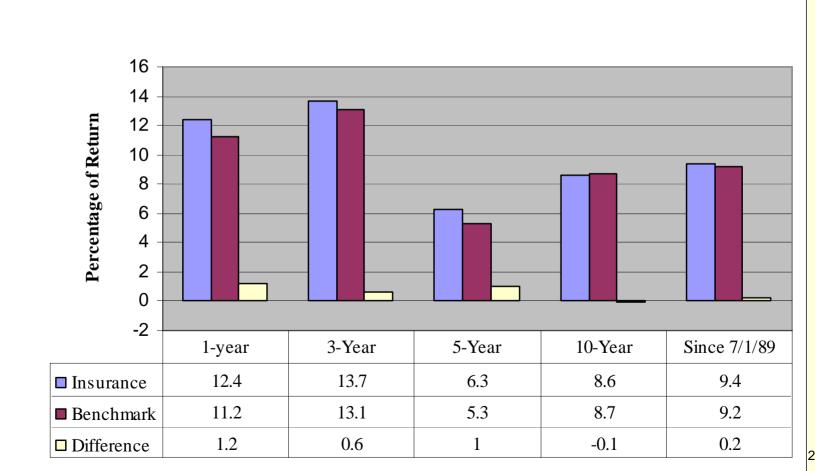
## **Kentucky Retirement Systems Investment Performance Compared to Benchmarks - PENSION**

KRS Investments have consistently met or exceeded performance benchmarks over the 1-, 3-, 5-, and 10-Year Periods



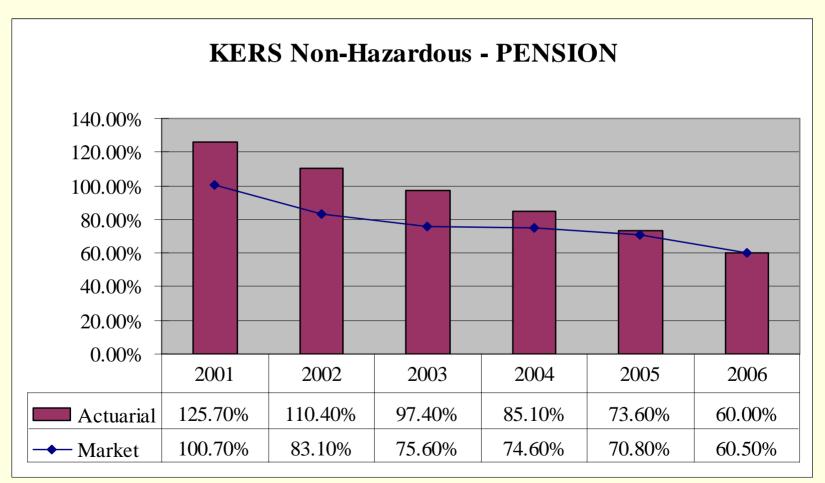
#### **Kentucky Retirement Systems Investment Performance Compared to Benchmarks - INSURANCE**

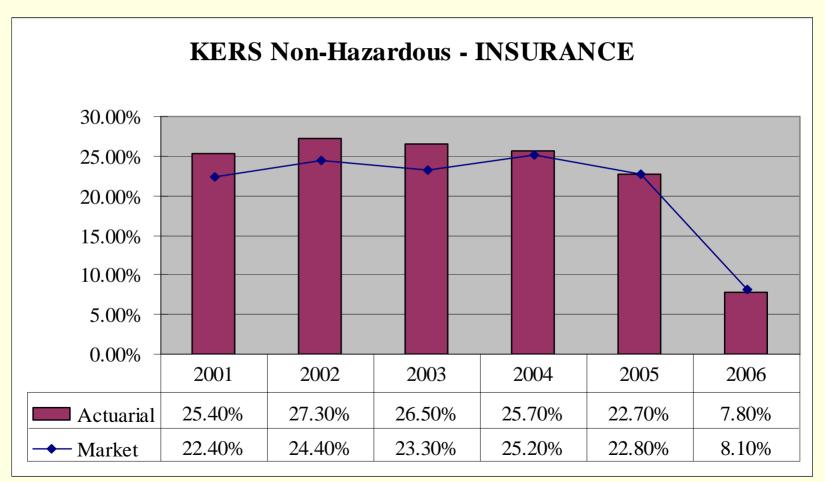
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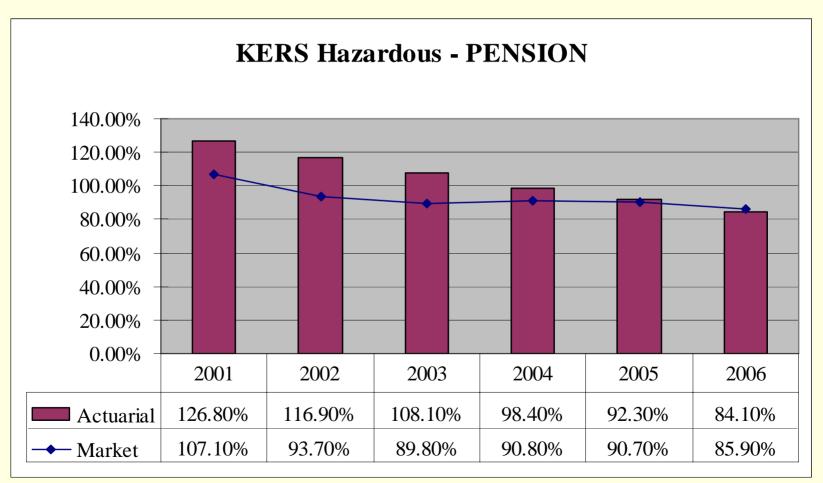


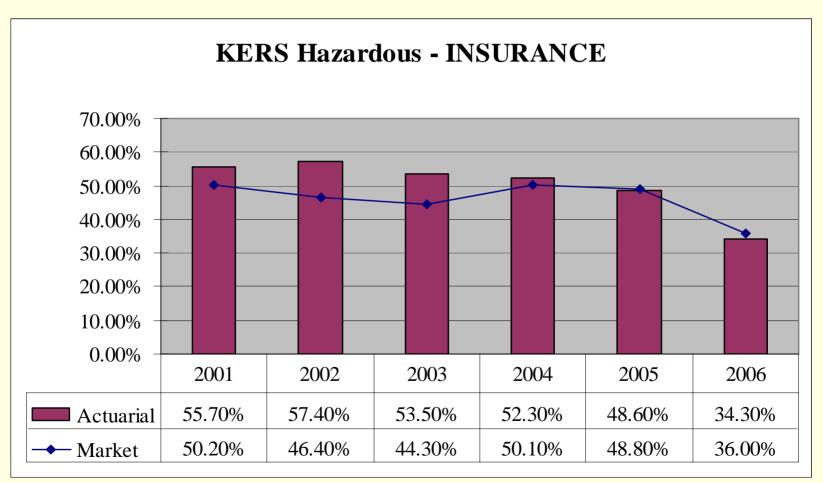
#### Funding Level

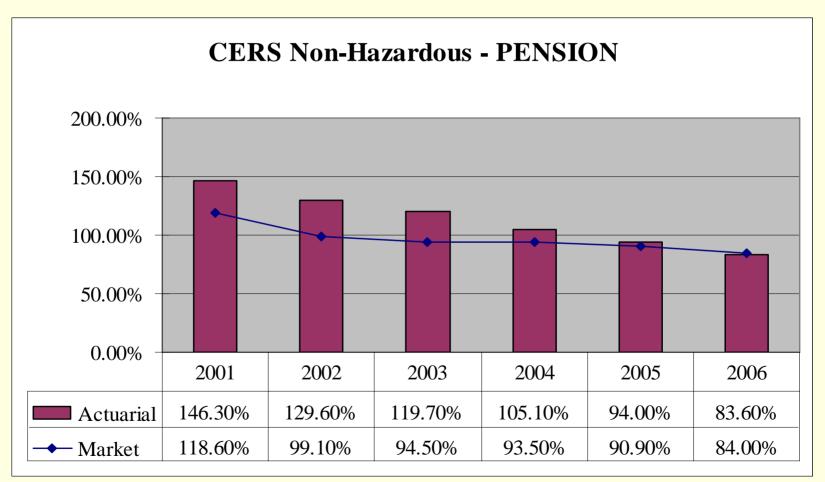
- Ratio of Actuarial Assets to Actuarial Liabilities
- Measure of the plan's financial soundness
- Provides a "snapshot" of the plan's ability to meet liabilities (benefits) earned to date
- Actuarial valuation is based on a 5-year smoothing method

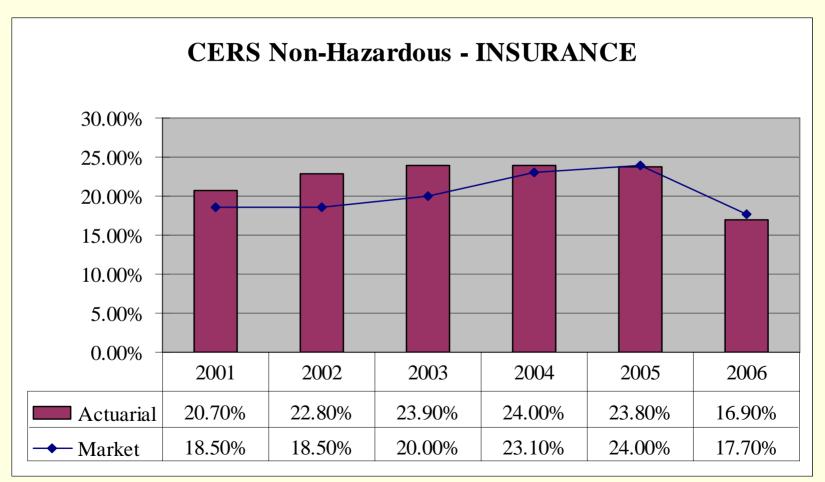


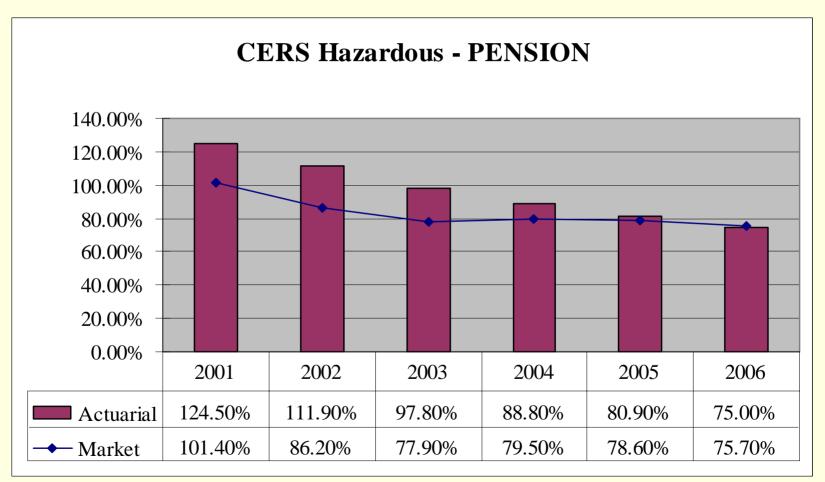


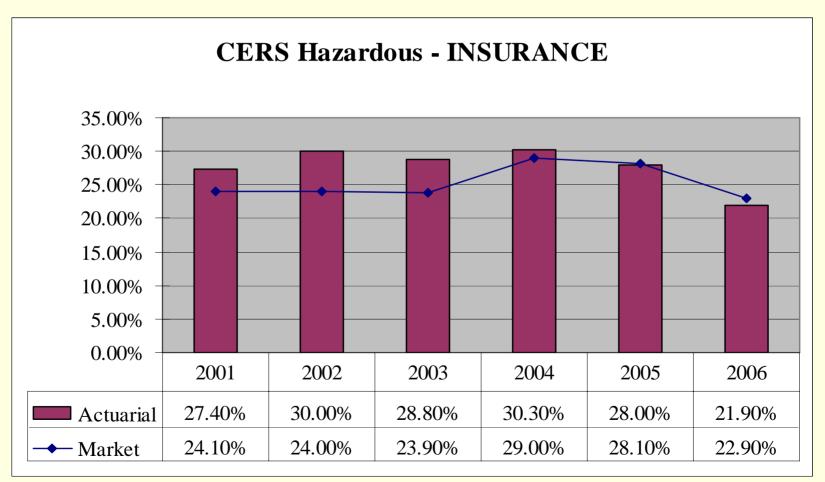


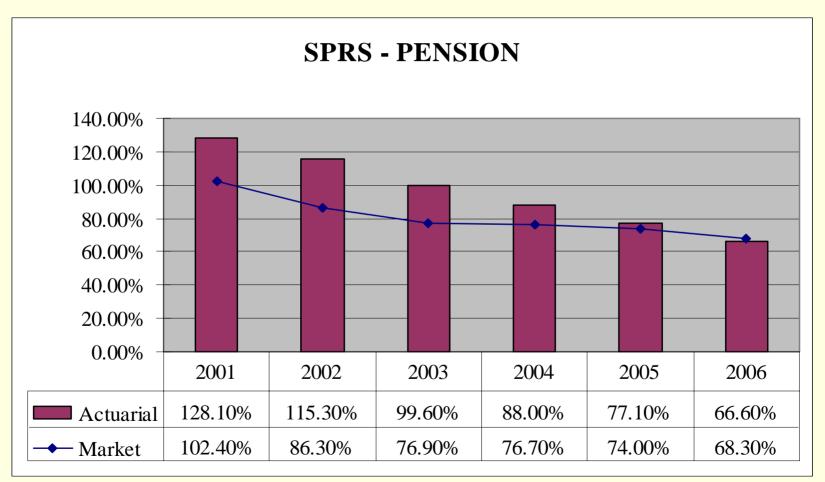


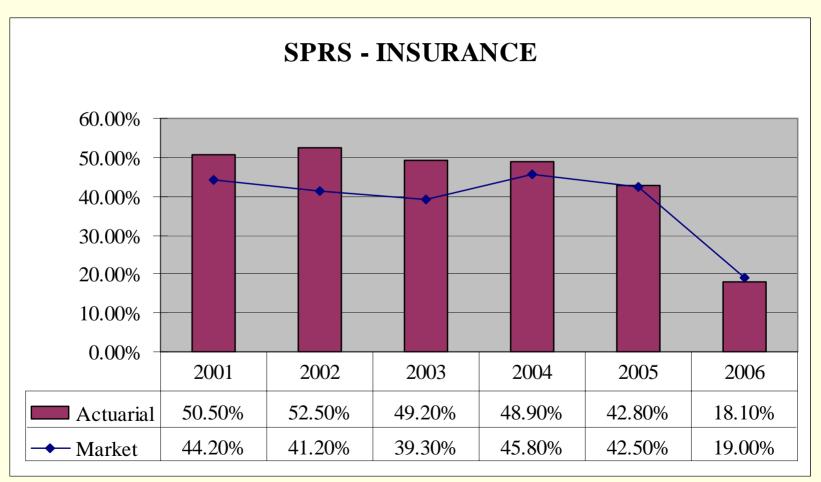












#### **■ Unfunded Actuarial Liability (UAL)**

- Difference between actuarial value of assets and liabilities
- Represents liabilities on benefits already earned by employees and retirees
- Amortized over a 30 year period, much like a home mortgage
- The amortized payment is a part of the employer contribution rate

### 2006 Unfunded Liabilities

(in billions of dollars)

				2006			2005
Ī	System	Pension	Insurance	Combined	Pension	Insurance	Combined
-	KERS Non-Haz	\$3.60	\$7.20	\$10.80	\$2.0	\$2.1	\$4.1
	KERS Hazardous	\$0.08	\$0.40	\$0.48	\$0.03	\$0.20	\$0.23
Ī	SPRS	<u>\$0.17</u>	\$0.48	<u>\$0.65</u>	<u>\$0.11</u>	\$0.13	\$0.24
	Total	\$3.85	\$8.08	\$11.93	\$2.14	\$2.43	\$4.57

Source: June 30, 2006 Actuarial Valuation

### 2006 Unfunded Liabilities

(in billions of dollars)

				2006			2005
ĺ	System	Pension	Insurance	Combined	Pension	Insurance	Combined
-	CERS Non-Haz	\$1.00	\$3.83	\$4.83	\$0.33	\$2.1	\$2.43
	CERS Hazardous	\$0.51	\$1.51	\$2.02	\$0.34	\$0.92	\$1.26
	Total	\$1.51	\$5.34	\$6.85	\$0.67	\$3.02	\$3.69

Source: June 30, 2006 Actuarial Valuation

# What Caused the Increase in Unfunded Liabilities?

- 1. Reductions to Employer Contribution Rates in KERS and SPRS
  - \$1.3 billion contribution and investment income shortfall over the past 15 years
- 2. Cost Inflation for Retiree Insurance
- 3. GASB 43/45
- 4. Benefit Enhancements
- 5. Retiree COLA increases not pre-funded
- 6. **2000-2002** Market Losses
  - KRS uses a Five Year Smoothing Method to report investment gains and losses
  - Under the Five Year Smoothing Method, 20% of the gain or loss in any one year is recognized in each of the following five years
  - This helps to keep employer contribution rates more stable

## **Historical Reductions to the Employer Contribution Rates KERS Non-Hazardous**

Kentucky Employees Retirement System (KERS). Non-Hazardous Employees								
Fiscal Year	Projected Salary	Recommended Employer Rate	Budgeted Employer Rate	Difference (%)	Difference (\$)	Difference Compounded (\$)*		
1992-1993	\$919,950,204	8.66%	7.65%	1.01%	\$9,291,497	\$28,188,785		
1993-1994	\$998,123,316	8.66%	7.65%	1.01%	\$10,081,045	\$28,253,245		
1995-1996	\$1,045,848,756	8.75%	8.56%	0.19%	\$1,987,113	\$4,752,580		
2002-2003	\$1,525,089,988	5.89%	3.76%	2.13%	\$32,484,417	\$44,605,324		
2002-2003	\$1,525,089,988	5.89%	3.76%	2.13%	\$32,484,4	<b>↓</b> 17		

5.89%

5.89%

5.89%

7.75%

8.50%

1.64%

4.40%

7.73%

9.38%

39.87%

Kentucky Employees Retirement System (KERS). Non-Hazardous Employees

Total KERS Non-Hazardous: \$1,114,213,028 \$1,196,233,508

\$26,196,450

\$72,978,607

\$127,190,386

\$155,324,104

\$678,679,411

7.53%

10.29%

13.62%

17.13%

48.37%

\$1.597.344.487

\$1,658,604,696

\$1,645,412,496

\$1,655,907,288

\$1,738,702,652

2003-2004

2004-2005

2005-2006

2006-2007

2007-2008\*

\$33,229,679

\$85,516,787

\$137,683,593

\$155,324,104

\$678,679,411

<sup>\*</sup>Reflects the Commonwealth's lack of prefunding health insurance benefits. In accordance with GASB 43, the investment return assumption has been reduced to a blended rate of 4.5% for the insurance funds.

## **Historical Reductions to the Employer Contribution Rates KERS Hazardous**

Kentucky	Employees	Retirement Syst	em (KERS).	<b>Hazardous Employees</b>
IXCIITUCA	Lillbiolecs	IXCHI CHICHI SYSU		Hazar uous Emproyees

Fiscal Year	Projected Salary	Recommended Employer Rate	Budgeted Employer Rate	Difference (%)	Difference (\$)	Difference Compounded (\$)*
1992-1993	\$62,696,196	17.55%	15.05%	2.50%	\$1,567,405	\$4,755,234
1993-1994	\$67,862,256	17.86%	15.05%	2.81%	\$1,906,929	\$5,344,381
1995-1996	\$69,357,624	18.05%	17.97%	0.08%	\$55,486	\$132,706
1999-2000	\$88,891,680	18.91%	18.66%	0.25%	\$222,229	\$387,076
2002-2003	\$123,647,407	18.84%	17.60%	1.24%	\$1,533,228	\$2,105,321
2004-2005	\$129,088,956	19.47%	18.84%	0.63%	\$813,260	\$952,984
2005-2006	\$126,664,812	21.59%	18.84%	2.75%	\$3,483,282	\$3,770,653
2006-2007	\$131,687,088	23.32%	22.00%	1.32%	\$1,738,270	\$1,738,270
2007-2008*	2007-2008* \$138,271,442 47.11%		24.25%	22.45%	\$31,717,637	\$31,717,637
,		<u>\$37,175,595</u>	<u>\$50,904,261</u>			

<sup>\*</sup>Reflects the Commonwealth's lack of prefunding health insurance benefits. In accordance with GASB 43, the investment return assumption has been reduced to a blended rate of 4.5% for the insurance funds.

#### **Historical Reductions to the Employer Contribution Rates SPRS**

State	Police	Retiremen	t System	(SPRS)

Fiscal Year	Projected Salary	Recommended Employer Rate	Budgeted Employer Rate	Difference (%)	Difference (\$)	Difference Compounded (\$)*
1992-1993	\$29,275,692	21.84%	19.57%	2.27%	\$664,558	\$2,016,154
1993-1994	\$31,285,572	21.84%	19.57%	2.27%	\$710,182	\$1,990,365
1995-1996	\$30,950,088	23.05%	21.78%	1.27%	\$393,066	\$940,097
1999-2000	\$35,865,072	25.26%	23.41%	1.85%	\$663,504	\$1,155,683
2002-2003	\$44,209,944	21.58%	17.37%	4.21%	\$1,861,239	\$2,555,722
2004-2005	\$43,760,832	28.08%	21.58%	6.50%	\$2,844,454	\$2,844,454
2005-2006	\$43,835,208	34.83%	21.58%	13.25%	\$5,808,165	\$5,808,165
2006-2007	\$43,720,092	42.30%	25.50%	16.80%	\$7,344,975	\$7,344,975
2007-2008*	\$45,906,097	120.00%	28.00%	92.00%	\$43,924,356	\$43,924,356
				Total SPRS:	<u>\$64,214,500</u>	<u>\$69,547,840</u>

<sup>\*</sup>Reflects the Commonwealth's lack of prefunding health insurance benefits. In accordance with GASB 43, the investment return assumption has been reduced to a blended rate of 4.5% for the insurance funds.

### **Cost Inflation for Retiree Insurance**

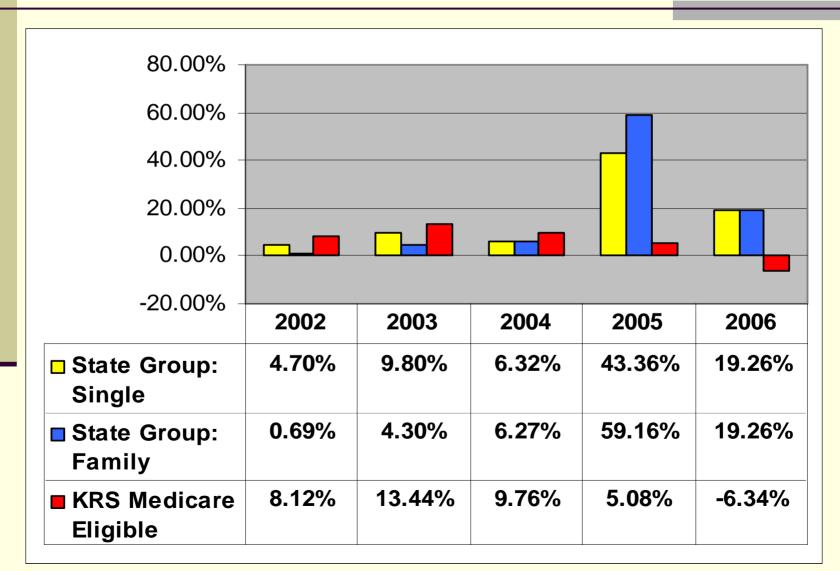
### Kentucky Employees Health Plan

- January 2000 Single Coverage Rate = \$214/month
- January 2005 Single Coverage Rate = \$410/month

### KRS Medicare Eligible Plan

- KRS began self-insured options in 2006
- Deflation in 2006 rates of 6.34%

## **Cost Inflation for Retiree Insurance** (2002 – 2006)



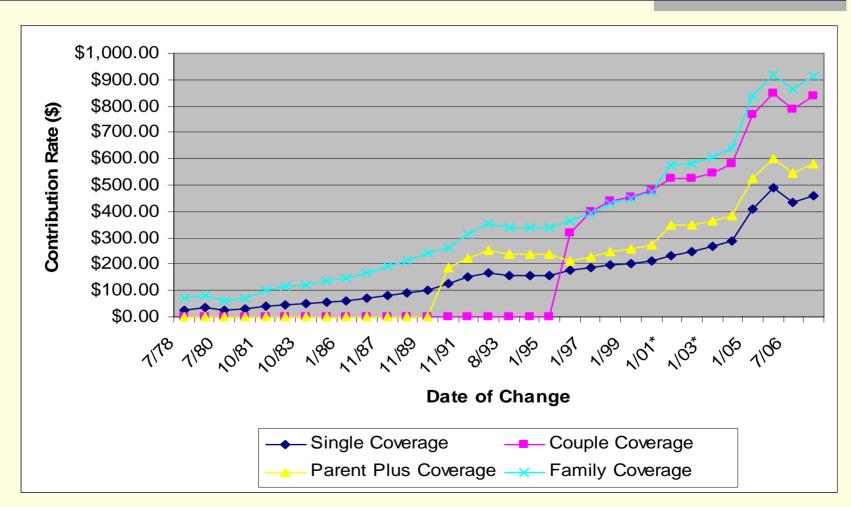
#### **KRS Insurance Contribution Rates**

#### since creation of medical insurance benefit for retirees in July 1978

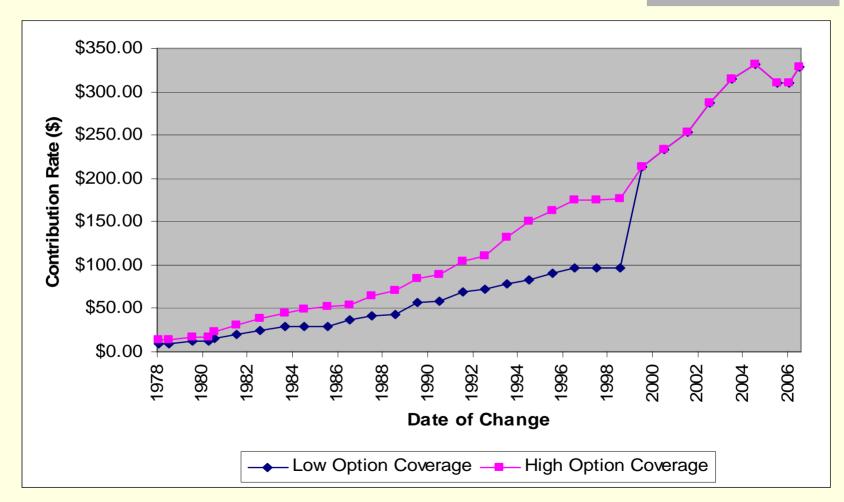
		Under	Age 65		Over Age 65			
Date of Change	Single Coverage	Couple Coverage	Parent Plus Coverage	Family Coverage	Date of Change	Low Option Coverage	High Option Coverage	
7/1978	\$25.50	N/A	N/A	\$70.00	7/1978	\$8.75	\$14.00	
1/1988	\$89.07	N/A	N/A	\$213.77	1/1988	\$41.40	\$63.75	
1/1998	\$194.50	\$437.15	\$249.08	\$431.55	1/1998	\$96.90	\$174.70	
1/2007	\$457.70	\$836.62	\$578.46	\$912.42	1/2007	\$329.00	\$329.00	
% Increase since Inception	1694.9%	161.6%	211.2%	1203.5%		3660.0%	2250.0%	
Avg. Annual Increase	10.85%	8.78%	7.12%	9.19%		13.91%	11.14%	
% Increase 1978-1990	387.3%	N/A	N/A	274.2%		544.0%	502.9%	
% Increase 1990-2003	268.3%	N/A	211.2%	248.3%		483.9%	289.8%	

#### **KRS Insurance Contribution Rates**

since creation of medical insurance benefit for retirees in July 1978



## KRS Insurance Contribution Rates for Low and High Option Coverage since creation of medical insurance benefit for retirees in July 1978



## **GASB 43/45**

- New accounting standards that specify how the costs, liabilities and funding progress for "Other Post Employment Benefits" (OPEB), such as medical, dental and other health-related benefits, are to be measured and reported in the financial reports of OPEB plans and government employers and other sponsors of OPEB benefits.
- Although GASB 43/45 do not actually require funding, an absence of action taken to fund OPEB liabilities will be viewed by bond rating agencies as a negative credit rating factor.

## **GASB 43/45**

- Under GASB 45, in order for actuaries to use long-term investment return assumptions, governments must set aside plan assets in irrevocable trusts. Partially funded plans are required to use a blended rate, based on the proportion of contributions being used for asset accumulation versus payment of current benefits. This is the reason a 4.5% blended rate, rather than the 7.75% rate was used for KERS and SPRS. The Commonwealth's lack of funding is directly resulting in higher contribution rates.
- The higher the investment return assumption (discount rate), the lower the present value of future liabilities and the corresponding annual required contribution needed to fund those liabilities.

## **Benefit Enhancements**

#### **Examples of Some Recent Benefit Enhancements**

- **1990:** Non-Hazardous Benefit Factor from 2.0 to 2.2% (CERS only)
- **1990:** "27 Years and Out" for Non-Hazardous becomes effective
- 1990, 1992: School Board participation requirements were reduced to 80 hours per month for a majority, then all employees
- 1996: Retiree Cost of Living Adjustment (COLA) with no pre-funding

## **Benefit Enhancements**

#### **Examples of Some Recent Benefit Enhancements**

- **1998:** CERS Hazardous high-three
- **1998:** KERS 2.2% benefit factor with 20 years service
- **2000:** School Board Employees receive 12 months service credit for 9 months work
- **2001:** High-three window for KERS and CERS Non-Hazardous

# Retiree Cost of Living Adjustment (COLA)

- In July each year, a recipient's retirement allowance is automatically increased by the average annual increase in the Consumer Price Index for All Urban Consumers (CPI-U) for the most recent calendar year, unless the Kentucky General Assembly reduces or eliminates the COLA
- Statute does not allow pre-funding: the COLA becomes an unfunded liability for a 30 year amortization period
- COLAs are NOT guaranteed by the inviolable contract language in state law: the General Assembly has the right to reduce, suspend, or eliminate the COLA in the future

# Retiree Cost of Living Adjustment (COLA)

#### According to Cavanaugh Macdonald, the KRS Actuary:

"...the [KRS] pension rates are increasing because of the annual cost of living adjustment (COLA)."

Statement of Tom Cavanaugh at November 16, 2006 KRS Board of Trustees meeting.

"...each COLA generates a negative cash flow in the early years followed by a positive cash flow later, exactly the opposite of what advanced funding would provide. This cash flow difference means fewer dollars to invest currently, lower investment returns, and higher employer costs over the long term than advanced funding the COLAs...."

March 22, 2007 letter from Cavanaugh Macdonald to KRS

## Impact of the July 1, 2006 COLA

## KRS Staff Projected Cost of Providing 3.4% COLA for Retired Members and Beneficiaries on July 1, 2006

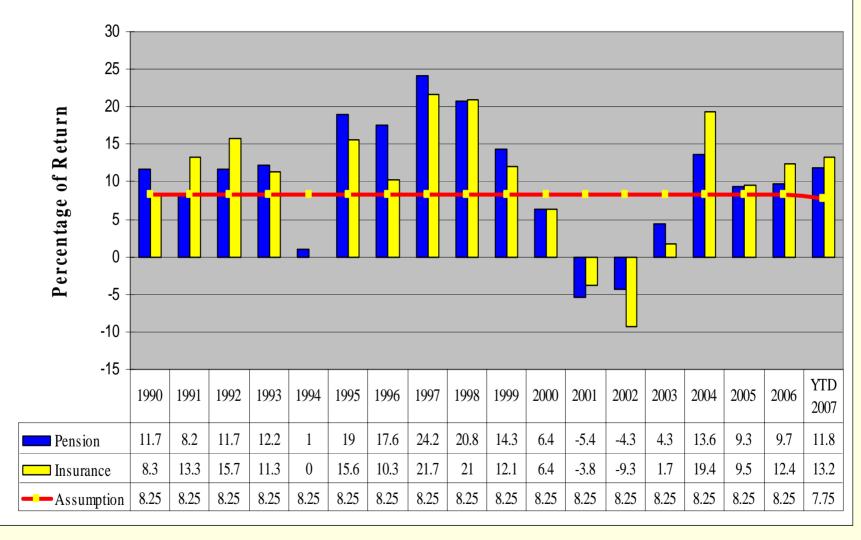
System	June 30, 2005 Actuarial Liability	COLA Adjustment	Increase in Actuarial Liabilities	Payroll	% Increase in Employer Rate	Amortized Payment
KERS Non- hazardous	\$4,939,967,757	3.4%	\$167,958,904	\$1,655,907,288	0.51%	\$8,414,775
KERS Hazardous	\$201,390,551	3.4%	\$6,847,279	\$131,687,088	0.26%	\$343,050
CERS Non- hazardous	\$2,673,500,272	3.4%	\$90,899,009	\$1,885,275,000	0.24%	\$4,554,059
CERS Hazardous	\$944,739,105	3.4%	\$32,121,130	\$411,121,728	0.39%	\$1,609,275
SPRS	\$339,769,169	3.4%	\$11,552,152	\$43,720,092	1.32%	\$578,765
			\$309,378,473			\$15,499,923

## 2000 – 2002 Market Losses

Longest market decline since World War II

- Five year actuarial smoothing method helps to minimize the annual impact of these losses
  - Under the smoothing method, 20% of a market gain or loss is accounted for each year
- In spite of this downturn, KRS investments have consistently met or exceeded benchmarks

#### KRS Investment Returns (1990 - YTD 2007)



## What Action Has Already Been Taken to Address These Issues?

- Board completed a full review in 2003 and offered several considerations to the Legislature as it relates to benefits for future employees
- Many of these options for new hires were implemented into law by **HB 290** (2004 GA)
- Savings from these changes were estimated by KRS staff to amount to \$2.25 billion dollars realized over a 20 year period as current employees are replaced by new employees covered under the new benefits provisions

# What Action Has Already Been Taken to Address These Issues?

#### **2004 Changes:**

- Employees hired on or after July 1, 2003 earn health insurance benefits based upon dollar value
  - Non-Hazardous: \$10/month for each year of actual service
  - Hazardous: \$15/month for each year of actual service

#### Purchases

- Purchases after 8/1/2004 do not count towards vesting for health insurance benefits
- Purchases made by new hires after 8/1/2004 will not count towards vesting for retirement eligibility
- Purchase factor methodology reviewed and amended in 2005

## What Action Has Already Been Taken to Address These Issues?

### ■ 2006 Actuarial Experience Study

- Modified actuarial assumptions related to retiree health premium increases, retirement rates, and life expectancies will increase rates
- In the end, GASB 43/45, changes in actuarial assumptions, including the expected continuation of retiree health premium inflation, and COLAs will exceed changes made to stabilize rates

## **Kentucky Retirement Systems**

**Questions and Comments**